

CODE DIVISION MULTIPLEXING COMMANDS ON A CODE DIVISION MULTIPLEXED CHANNEL

ABSTRACT

[1113] Techniques for efficient signaling to a plurality of mobile stations are disclosed. In one embodiment, each of a plurality of symbol streams are encoded with one of a plurality of covering sequences, the covered symbol streams are combined to form a Code Division Multiplexed (CDM) signal, and the CDM signal is further covered by another covering sequence for code division multiplexing with one or more additional signals for transmission to a remote station. In another embodiment, a plurality of CDM signals are formed from the covered symbol streams, and the plurality of CDM signals are Time Division Multiplexed (TDM) prior to the further covering. In other embodiments, discovering and demultiplexing is performed to recover one or more of the symbol streams. Various other aspects are also presented. These aspects have the benefit of providing efficient utilization of the reverse link capacity, accommodating varying requirements such as low-latency, high throughput or differing quality of service, and reducing forward and reverse link overhead for providing these benefits, thus avoiding excessive interference and increasing capacity.